

Minutes, 1/5/05 Tevatron BPM Upgrade Meeting
Jim Steimel

This set of minutes, and all future minutes, are or will be deposited in the Beams Document Database as document number 792.

The agenda as announced consisted of:

1. Report from Bob
2. Report from subproject leaders
3. Report from Technical Coordinator -- Jim Steimel
4. AOB

1. Report from Bob, Steve is away Mon-Wed this week.

- There is some concern on Craig McClure's part that his timing board might not be able to drive 50 ohms. Bob has asked that terminating the rest of the EchoTek inputs wait until further tests can be made with Craig's timing module.

- Peter Prieto and Duane Voy are working on testing turn-by-turn operation with the Tevatron version of the EchoTek module with the Recycler front-end to verify some of the problems we have seen with our turn-by-turn operation (see report from Jim Steimel below).

2. Reports from L2 Managers

Tim Kasza:

- Tim's slides can be found in AD doc 1381-v14.
- 129 EchoTek boards are tested and ready for issue with the latest firmware. Firmware upgrading has ceased until turn-by-turn operation issues are resolved due to the likelihood of requiring another firmware update.
- A testplan for the filter and timing boards is being edited to include comments received on the first version.
- Expecting delivery of TGF boards this week.
- Two filter board assemblies have arrived and are ready for issue, but they need ejector handle upgrades.
- Cable panels at A3 are labeled. Bill Barker has completed 4 of 27

36' Lemo-Lemo cables. Judy Sabo is testing flexible 20" cables for clock and sync signal distribution.

Vince Pavlicek:

- Timing module panels will arrive at the end of the month.
- Filter modules will start to arrive soon.

Brian Hendricks:

- Charlie Briegle and Bob West are working on the crate diagnostics software.
- Brian is working on a bug in SDA acquisition of BPM data.
- Lin Winterowd is working on pbar capability for T39.

Margared Votava:

- Kurt Biery has started working on BPM documentation.

Mike Martens:

- Grid scan was performed. Observed beam motion was about 95% of the expected beam motion. Bob, Rob, and Mike are continuing to analyze the data.
- There are still problems with profile frames. The data makes it to the front end, but the application doesn't access it correctly. The application always returns profile index 0 when other indexes are requested.
- Mike tested the turn-by-turn acquisition on coasting beam, but did not get reasonable results. Problems with turn-by-turn acquisition was confirmed on the test stand.

Rob Kutschke:

- Rob is compiling phase and amplitude mismatch data from cable, filter, and EchoTek data.
- Rob is looking at injection, reverse injection, and grid study data.
- Rob is working on a more automated method of retrieving data from the datalogger.

3. Report from Jim Steimel, Technical Coordinator

- The Greychip settings for the turn-by-turn operation were improved and tested on the B3 test stand. Results of the tests are shown in the BPM log book.
- The BPM log book has been activated. Unfortunately, it only accepts entries from accelerator division computers. I will continue negotiations on allowing CD DHCP computers write-access to the log book.
- DeHong, Luciano, and I worked on debugging the turn-by-turn acquisition. There seems to be a problem in the receiver skip data process when the Greychip is not reset between triggers. There is a difference between the Recycler version of the EchoTek firmware and the Tevatron version. The Recycler version of the firmware resets the Greychip registers after every trigger, the Tevatron version does not.
- DeHong has contacted EchoTek about a firmware revision that more closely represents the Recycler version of operation.

4. AOB.